

Notice of Allowability

Application No.

09/840,333

Applicant(s)

MORIMOTO ET AL.

Examiner

Joseph R. Maniwang

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/03/04.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

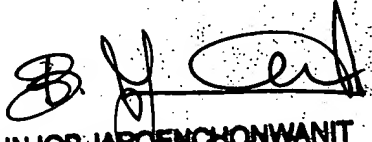
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 05/03/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 05/03/04 was in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement was considered by the Examiner.

Allowable Subject Matter

2. Claims 1-18 are allowed.
3. The following is an examiner's statement of reasons for allowance:
4. The provision for a spatial data mining apparatus for introducing a two-dimensional association rule extracted from a database, which includes spatial information, such as addresses, comprising definition means, for defining an objective function that is used to evaluate said two-dimensional association rule; input means, for entering geographical information; division means, for employing said geographical information to divide a region on said map into pixel grids having a predetermined size; data aggregation means, for extracting data from said database and for aggregating data for each of said pixel grids obtained by said division means; grid region calculation means, for employing aggregates to calculate the region of a pixel grid that optimizes said objective function; entity extraction means, for employing said geographical information to extract entities depicted on a map; proposed edge selection means, for selecting, from among said entities, proposed regional edges that correspond to said

Art Unit: 2144

region obtained by said grid region calculation means; and output means, for employing said proposed regional edges to output a region corresponding to said geographical information is not fairly taught or suggested by the prior art of record. Support for this functionality can be found in the Specification, p. 12-13; Fig. 2.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Aggarwal et al. (U.S. Pat. No. 6,307,965)

Chadha et al. (U.S. Pat. No. 6,301,575)

Agrawal et al. (U.S. Pat. No. 6,003,029)

Kim et al. (U.S. Pat. No. 5,988,853)

Friederich et al. (U.S. Pat. No. 6,393,149)

Wallet et al. (U.S. Pat. No. 6,363,327)

Morimoto et al. (U.S. Pat. App. Pub. 2001/0051947)

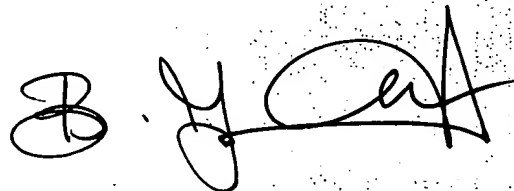
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R. Maniwang whose telephone number is (571) 272-3928. The examiner can normally be reached on Mon-Fri 8:00-4:30.

Art Unit: 2144

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JM



BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER